Request to Archive
With The National Centers for Environmental Information
For Physical and biological data collected from buoys and moorings in the Columbia River Estuary and nearby coastal ocean from OHSU and CMOP, compiled by NANOOS.
Provided by NANOOS

2016-12-01

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Emilio Mayorga
NANOOS
DMAC
mayorga@apl.washington.edu
preferred method: e-mail

2. Name the organization or group responsible for creating the dataset.

Oregon Health & Science University (OHSU), Center for Coastal Observation and Prediction (CMOP), and Northwest Association of Networked Ocean Observing Systems (NANOOS)

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

Data is predominantly long time series at fixed moorings and buoys with a variety of instruments including CTDs, Acoustic Doppler Profilers, CDOM fluorometers, chlorophyll fluorometers, phycoerthrin fluorometers, Seabird oxygen sensors, FLNTUs, optical turbidity sensors, pH sensors, and nitrate sensors (ISUS and SUNA).

The region we are collecting data in is the Columbia River estuary and nearby coastal ocean, approximately 124.5 W to 123 W by 46 N to 46.5 N.

Currently the intention is to archive the 2 different catalogs.
1. non-QC <- ongoing automation.
2. QC <- yearly update.

NANOOS is one of 11 Regional Associations established nationwide through the NOAA Integrated Ocean Observing System (IOOS). IOOS coordinates the multi-agency, cooperative effort to routinely collect realtime data and manage historical information based on a continuously operating network of buoys, ships, satellites, underwater vehicles, and other platforms. These data are needed for many purposes which include rapid detection and prediction of changes in our nation's ocean and coastal waters.

air_pressure
air_temperature
depth
eastward_sea_water_velocity
fractional_saturation_of_oxygen_in_sea_water
latitude

longitude
mass_concentration_of_chlorophyll_in_sea_water
mole_concentration_of_dissolved_molecular_oxygen_in_sea_water
mole_concentration_of_nitrate_in_sea_water
mole_concentration_of_phosphate_in_sea_water
northward_sea_water_velocity
raw_mass_concentration_of_chlorophyll_in_sea_water
raw_sea_water_turbidity
relative_humidity
sea_water_electrical_conductivity
sea_water_ph_reported_on_total_scale
sea_water_practical_salinity
sea_water_pressure
sea_water_temperature
sea_water_turbidity
surface_downwelling_photosynthetic_photon_flux_in_air
surface_partial_pressure_of_carbon_dioxide_in_sea_water
time
upward_sea_water_velocity
volume_absorption_coefficient_of_radiative_flux_in_sea_water_due_to_dissolved_organic_matter
volume_scattering_function_of_radiative_flux_in_sea_water
wind_from_direction
wind_speed
wind_speed_of_gust

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)
From 2000-12-01
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:
N/A

6. Approximate date when the dataset was or will be released to the public:
2016-11-30

7. Who are the expected users of the archived data? How will the archived data be used?
Oceanographers. Integrated Ocean Observing System affiliates.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?
No

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?
N/A

10. List the input datasets and ancillary information used to produce the data.
Using the python bagit.py package, https://github.com/LibraryOfCongress/bagit-python, to generate the archival

information packages.

11. List web pages and other links that provide information on the data.
Packages use the Library of Congress BagIt convention.
http://www.digitalpreservation.gov/multimedia/videos/bagit0609.html

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
1. https://www.nodc.noaa.gov/data/formats/netcdf/v2.0/

13. Indicate the data file format(s).
1. netCDF-4 Classic
2. NCEI netCDF Templates v2.0

14. Are the data files compressed?
No

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).
Submission Information Packages (SIP) will be organized into 'bags'. Each 'bag' will contain data, metadata, and manifest files which fully document the files intended to be submitted. The 'bags' will be folders on http://data.nanoos.org/ncei/ohsucmop/ which correspond to the name of the platform. E.g. abpoa/, riverrad/, saturn01/, etc. Within the station folder (or 'bag') there will be four standard files with the following names: bag-into.txt, bagit.txt, manifest-sha256.txt, and tagmanifest-sha256.txt as well as a data/ directory which will contain folders for all of the netCDF files to be submitted. Each of the folders within the data/ directory represent an instrument/instrument deployment.

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?
Example data files can be found at http://data.nanoos.org/ncei/ohsucmop/.

17. What is the total data volume to be submitted?
Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume:	26GB
Number of Data Files:	1490

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate:	141MB per Month
Data File Frequency:	31 per Month
Data Production Start:	2016-11-30

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.
Revision/replacement files will be provided as applicable.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location:	E.g., City, State
System Name:	Identification of the system supplying the data to the Archive.
System Owner:	NANOOS
Additional Information:	http://data.nanoos.org/ncei/ohsucmop/

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL

NCEI will pull from NANOOS web accessible folder http://data.nanoos.org/ncei/ohsucmop/.

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. Direct download links
2. Advanced web services (e.g., THREDDS Catalog Service)

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

Data set fits within NOAA's mission. OSTP: Increasing Access to the Results of Federally Funded Scientific Research.

24. Are the data archived at another facility or are there plans to do so? Please explain.

No

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

We've been in contact with Mathew Biddle (mathew.biddle@noaa.gov).

26. Do you have a data management plan for your data?

No

27. Have funds been allocated to archive the data at NCEI?

Through the Integrated Ocean Observing System Data Discover, Access, and Archiving Project.

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

Oregon Health & Science University (OHSU) and Center for Coastal Observation and Prediction (CMOP)

29. Is there a desired deadline for NCEI to archive and provide access to the data?

No deadlines for archive or access.

30. Add any other pertinent information for this request.

Please include Mathew Biddle, from NCEI point of contact for IOOS, in the review.